

JULY 1, 2016
ACTUARIAL VALUATION OF
THE NEW PENSION PLAN
OF
THE CITY OF CENTRAL FALLS

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Report Summary:

<u>Highlights</u>	<u>July 1, 2015</u>	<u>July 1, 2016</u>
<u>Contributions</u>		
Funding Schedule FY 2017	\$2,471,491	\$2,192,353
Funding Schedule FY 2018	\$2,543,313	\$2,255,280
<u>Funded Ratios</u>		
GAS No. 25	17.4%	24.1%
<u>Participants</u>		
Actives	79	81
Retirees and Beneficiaries	68	66
Vested	0	0
Inactives	0	0
Disabled	<u>57</u>	<u>56</u>
Total	204	203
<u>Payroll</u>		
Payroll of Active Members	\$4,482,450	\$4,836,099
Average Payroll	56,740	59,705
<u>Normal Cost</u>		
Employer	368,751	167,013
Employee	414,186	443,663
Administrative Expenses	<u>0</u>	<u>0</u>
Total	782,937	610,676
<u>Actuarial Accrued Liabilities</u>		
Actives	10,458,670	8,639,613
Retirees, Beneficiaries, Disabilities and Inactives	<u>29,796,974</u>	<u>24,281,779</u>
Total	40,255,644	32,921,392
<u>Actuarial Value of Assets</u>	<u>6,984,572</u>	<u>7,945,248</u>
<u>Unfunded Actuarial Accrued Liabilities</u>	\$33,271,072	\$24,976,144

Introduction

The purpose of this report is to present the findings of an actuarial valuation as of July 1, 2016, of the Central Falls New Pension Plan for the purpose of funding the plan. Separate report was prepared for accounting and financial disclosure purposes.

The actuarial valuation is based on:

- Negotiated provisions with the Fire and Police unions as of July 1, 2016.
- Employee data provided by the City
- Asset information reported by the City of Central Falls

During the last twelve months, the total unfunded actuarial accrued liability decreased by 24.9% to \$24,976,144. The decrease is greater than expected. There was an actuarial gain of \$921,568. The investment return assumption was changed to 7.5%. This decreased the unfunded actuarial accrued liability by \$7,206,622, the employer normal cost by \$301,004. Sources of (gains) and losses are as follows:

	<u>(Gain) / Loss</u>
Assets	15,832
Salary Increases	406,222
New Participants	0
Active - Retirements	(30,826)
Active - Terminations	52,929
Active - Mortality	(28,546)
Active - Disabilities	(153,996)
Inactive - Mortality and data adjustments	(627,816)
Other	<u>(555,367)</u>
Total (Gain) / Loss	(921,568)

Actuarial Costs and Liabilities:

Normal Costs

The normal cost is the sum of the individual normal costs determined for each member as if the assumptions underlying the cost determinations had been exactly realized. An individual normal cost represents that part of the cost of a member's future benefits which are assigned to the current year as if the costs are to remain level as a percentage of the member's pay. Benefits payable under all circumstances (i.e., retirement, death, disability, and terminations) are included in this calculation. Anticipated employee contributions to be made during the year are subtracted from the total normal cost to determine employer normal cost. The total normal cost is divided by total payroll to determine the normal cost as a percent of pay. The normal cost is shown in Table I.

Table I

	<u>July 1, 2015</u>	<u>July 1, 2016</u>
Superannuation	\$501,484	\$366,151
Termination	20,992	20,573
Death	39,911	34,190
Disability	220,550	189,762
Administrative Expenses	<u>0</u>	<u>0</u>
Total Normal Cost	782,937	610,676
% of Pay	17.5%	12.6%
Employee Contributions	414,186	443,663
% of Pay	9.2%	9.2%
Employer Normal Cost	\$368,751	\$167,013
% of Pay	8.2%	3.5%

Present Value of Actuarial Accrued Liabilities

The actuarial accrued liabilities (AAL) represents today's value of all benefits based on the past service of the actives and inactive. The AAL can be compared to the assets to determine the funded status of the Plan. The value of these earned benefits is shown in Table II below.

Table II

	<u>July 1, 2015</u>	<u>July 1, 2016</u>
Actives		
Superannuations	\$8,737,307	\$7,334,675
Termination	(75,029)	(91,280)
Death	180,347	137,060
Disability	1,616,045	1,259,158
Retirees and Inactives		
Retirees and Beneficiaries	13,572,988	11,657,475
Vested	0	0
Terminated (Refund)	0	0
Disabled	<u>16,223,986</u>	<u>12,624,304</u>
Total	\$40,255,644	\$32,921,392

Present Value of Future Benefits

The present value of future benefits represents today's value of all benefits earned by the inactive participants as well as all benefits earned and expected to be earned in the coming years by the active participants. The difference between the present value of future benefits and the present value of actuarial accrued liabilities is the value of benefits to be earned in the coming years. The value of the total expected benefits is shown in Table III.

Table III

	<u>July 1, 2015</u>	<u>July 1, 2016</u>
Actives		
Superannuation	14,460,963	\$10,963,624
Termination	165,476	113,095
Death	631,029	472,583
Disability	4,130,874	3,139,383
Retirees and Inactives		
Retirees and Beneficiaries	13,572,988	11,657,475
Vested	0	0
Terminated (Refund)	0	0
Disabled	<u>16,223,986</u>	<u>12,624,304</u>
Total	\$49,185,316	\$38,970,464

Funded Status and Appropriations:

Market Value of Plan Assets

The trust fund composition on a market value basis is shown in Table IV.

Table IV

	<u>July 1, 2015</u>	<u>July 1, 2016</u>
Cash equivalents	\$0	\$0
John Hancock	6,984,572	214,933
Century	0	7,697,338
Accounts receivable	0	32,977
Accounts payable	0	0
Accrued income	<u>0</u>	<u>0</u>
Total Market Value	\$6,984,572	\$7,945,248
Total Actuarial Value	\$6,984,572	\$7,945,248

Unfunded Actuarial Accrued Liabilities

Under the Entry Age Normal Actuarial Cost Method, the Actuarial Accrued Liability represents what the accumulated assets would have been as of the valuation date if:

- current plan provisions and assumptions had always been in effect,
- experience conformed exactly to assumptions, and
- the normal cost had been contributed each year since inception.

The actuarial value of the Fund's assets as of the end of the prior year are subtracted from the Actuarial Accrued Liability (AAL) to determine the Unfunded Actuarial Accrued Liability (UAAL) as of the valuation date. Over time, annual pension contributions will accumulate Plan assets equal to the AAL, and the UAAL will be eliminated. Thereafter, annual contributions equal to the normal cost will keep the Plan's assets and liabilities in balance. The UAAL is developed in Table V.

Table V

	<u>July 1, 2015</u>	<u>July 1, 2016</u>
Actuarial Accrued Liability	\$40,255,644	\$32,921,392
Actuarial Assets	<u>6,984,572</u>	<u>7,945,248</u>
Unfunded Actuarial Accrued Liability	\$33,271,072	\$24,976,144
Funded Status	17.4%	24.1%

Appropriations

The pension appropriation for the upcoming fiscal years have been calculated in accordance with the policy setforth in 2002. The pension appropriation is the sum of the:

- Employer normal cost,
- Increasing amortization of the unfunded actuarial accrued liability by June 30, 2034
 \$ 24,976,144 over 18 years with 3.0% increasing payments
- Interest adjustment for payments deposited at the middle of the fiscal year.

The pension appropriation is shown in Table VI.

Table VI

	<u>July 1, 2015</u>	<u>July 1, 2016</u>
Normal cost	\$368,751	\$167,013
Amortization payment of the unfunded accrued liability	<u>1,966,736</u>	<u>1,947,480</u>
Total cost	\$2,335,487	\$2,114,493
% of Pay	52.1%	43.7%
Fiscal 2017 cost	\$2,471,491	\$2,192,353
Fiscal 2018 cost	\$2,543,313	\$2,255,280

Appropriation Forecast

The following exhibit forecasts employer and employee contributions over the next 32 years under the adopted funding schedule.

Note that the forecast is based upon an "open group" method. This method assumes that sufficient employees will be hired each year to keep the number constant. The total payroll of the system is expected to increase 3% per year. The employee contribution rate is expected to increase to 10.5% by 2032 as members contributing base percentage of 9.5% are replaced by new members, whose base contribution is 10.5%. Payments are assumed to be made at the beginning of the year.

The employer total cost is expected to increase during the next 20 years until the unfunded liabilities are completely paid off, at which time only the normal cost will remain. The total cost represents 45% of payroll until the time the unfunded liabilities are fully paid off, leaving only a normal cost of 2.7% in 2035. The decrease in the cost as a percentage of payroll is a result of the increase in member deductions.

Appropriation Forecast

<u>Fiscal Year Ending</u>	<u>Payroll</u>	<u>Employee Contribution</u>	<u>Employer Normal Cost with Interest</u>	<u>Amortization Payments with Interest</u>	<u>Employer Total Cost with Interest</u>	<u>Employer Total Cost % of Payroll</u>	<u>Funded Ratio %*</u>
2017	\$4,836,099	\$443,663	\$173,163	\$2,019,190	\$2,192,353	45.3	24.1
2018	\$4,981,182	\$459,716	\$175,514	\$2,079,766	\$2,255,280	45.3	26.6
2019	\$5,130,617	\$476,333	\$177,850	\$2,142,159	\$2,320,009	45.2	29.2
2020	\$5,284,536	\$493,533	\$180,168	\$2,206,424	\$2,386,592	45.2	32.0
2021	\$5,443,072	\$511,336	\$182,465	\$2,272,617	\$2,455,082	45.1	35.0
2022	\$5,606,364	\$529,763	\$184,738	\$2,340,795	\$2,525,533	45.0	38.2
2023	\$5,774,555	\$548,836	\$186,983	\$2,411,019	\$2,598,002	45.0	41.6
2024	\$5,947,792	\$568,577	\$189,197	\$2,483,350	\$2,672,547	44.9	45.3
2025	\$6,126,226	\$589,008	\$191,375	\$2,557,850	\$2,749,225	44.9	49.2
2026	\$6,310,012	\$610,153	\$193,514	\$2,634,586	\$2,828,100	44.8	53.3
2027	\$6,499,313	\$632,036	\$195,608	\$2,713,623	\$2,909,231	44.8	57.6
2028	\$6,694,292	\$654,684	\$197,654	\$2,795,032	\$2,992,686	44.7	62.1
2029	\$6,895,121	\$678,121	\$199,647	\$2,878,883	\$3,078,530	44.6	66.9
2030	\$7,101,974	\$702,376	\$201,582	\$2,965,249	\$3,166,831	44.6	71.8
2031	\$7,315,034	\$727,475	\$203,453	\$3,054,207	\$3,257,660	44.5	77.0
2032	\$7,534,485	\$753,448	\$205,254	\$3,145,833	\$3,351,087	44.5	82.4
2033	\$7,760,519	\$776,052	\$211,412	\$3,240,208	\$3,451,620	44.5	88.0
2034	\$7,993,335	\$799,333	\$217,754	\$3,337,414	\$3,555,168	44.5	93.9
2035	\$8,233,135	\$823,313	\$224,287	\$0	\$224,287	2.7	100.0
2036	\$8,480,129	\$848,013	\$231,016	\$0	\$231,016	2.7	100.0
2037	\$8,734,533	\$873,453	\$237,946	\$0	\$237,946	2.7	100.0
2038	\$8,996,569	\$899,657	\$245,084	\$0	\$245,084	2.7	100.0
2039	\$9,266,466	\$926,647	\$252,437	\$0	\$252,437	2.7	100.0
2040	\$9,544,460	\$954,446	\$260,010	\$0	\$260,010	2.7	100.0
2041	\$9,830,794	\$983,079	\$267,810	\$0	\$267,810	2.7	100.0
2042	\$10,125,717	\$1,012,572	\$275,845	\$0	\$275,845	2.7	100.0
2043	\$10,429,489	\$1,042,949	\$284,120	\$0	\$284,120	2.7	100.0
2044	\$10,742,374	\$1,074,237	\$292,644	\$0	\$292,644	2.7	100.0
2045	\$11,064,645	\$1,106,464	\$301,423	\$0	\$301,423	2.7	100.0
2046	\$11,396,584	\$1,139,658	\$310,466	\$0	\$310,466	2.7	100.0
2047	\$11,738,482	\$1,173,848	\$319,780	\$0	\$319,780	2.7	100.0
2048	\$12,090,636	\$1,209,064	\$329,373	\$0	\$329,373	2.7	100.0

* Beginning of Fiscal Year

EXHIBITS

Exhibit 1 - Age/Service Distribution with Salary as of July 1, 2016

Attained Age	Average Salary	<5	5-9	10-14	15-19	20-24	25-29	30+	Total
< 20		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
20-24		2	0	0	0	0	0	0	2
		4,962	0	0	0	0	0	0	4,962
25-29		10	1	0	0	0	0	0	11
		41,782	55,199	0	0	0	0	0	43,001
30-34		11	8	2	0	0	0	0	21
		41,970	55,034	53,416	0	0	0	0	48,037
35-39		2	7	1	0	0	0	0	10
		25,585	56,362	67,783	0	0	0	0	51,349
40-44		1	5	7	6	0	0	0	19
		45,452	55,940	57,841	64,564	0	0	0	58,812
45-49		0	1	3	1	1	1	0	7
		0	53,449	58,322	50,023	64,479	70,457	0	59,053
50-54		1	0	0	1	4	0	0	6
		53,700	0	0	54,471	70,970	0	0	65,342
55-59		0	0	0	1	0	2	0	3
		0	0	0	57,500	0	70,022	0	65,848
60-64		0	0	0	1	0	0	1	2
		0	0	0	54,449	0	0	66,055	60,252
65-69		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
70+		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
Total Employees		27	22	13	10	5	3	1	81
Average Salary		38,509	55,598	58,036	60,383	69,672	70,167	66,055	52,421

Exhibit 2 - Retiree Distribution as of January 1, 2016

Attained Age	Number of Employees			Total Payments		
	Female	Male	Total	Female	Male	Total
< 20	0	0	0	0	0	0
20-24	0	0	0	0	0	0
25-29	0	0	0	0	0	0
30-34	0	0	0	0	0	0
35-39	0	0	0	0	0	0
40-44	0	0	0	0	0	0
45-49	0	5	5	0	86,572	86,572
50-54	0	9	9	0	146,172	146,172
55-59	1	7	8	38,947	144,847	183,794
60-64	3	8	11	42,287	147,847	190,133
65-69	0	8	8	0	121,676	121,676
70-74	3	2	5	39,976	45,101	85,077
75-79	3	1	4	47,748	28,850	76,597
80-84	3	2	5	62,156	2,615	64,771
85-89	5	1	6	56,225	5,674	61,899
90-94	4	1	5	35,811	6,612	42,424
95+	0	0	0	0	0	0
Total	22	44	66	323,150	735,965	1,059,115
Average (Age/Payment)	80.14	62.35	68.28	14,689	16,726	16,047
Frequency Percent	33.3	66.7	100.0	30.5	69.5	100.0

Exhibit 3 - Disabled Retiree Distribution as of January 1, 2016

Attained Age	Number of Employees			Total Payments		
	Male	Female	Total	Male	Female	Total
< 20	0	0	0	0	0	0
20-24	0	0	0	0	0	0
25-29	0	0	0	0	0	0
30-34	0	0	0	0	0	0
35-39	0	0	0	0	0	0
40-44	1	0	1	24,388	0	24,388
45-49	1	0	1	24,346	0	24,346
50-54	6	0	6	136,906	0	136,906
55-59	8	0	8	202,773	0	202,773
60-64	8	0	8	194,521	0	194,521
65-69	8	0	8	178,476	0	178,476
70-74	13	0	13	253,428	0	253,428
75-79	6	0	6	90,499	0	90,499
80-84	3	0	3	60,713	0	60,713
85-89	1	0	1	13,422	0	13,422
90-94	1	0	1	21,508	0	21,508
95-99	0	0	0	0	0	0
Total	56	0	56	1,200,980	0	1,200,980
Average (Age/Payment)	66.8	0.0	66.8	21,446	0	21,446
Frequency Percent	100.0	-	100.0	100.0	-	100.0

EXHIBIT 4 - CASHFLOW FORECAST:

The following is a 30 year forecast of benefit payments, contribution income and investment returns.

Fiscal Year Ending	Benefit Payments	Employee Contributions	Employer Contributions	Investment Returns	Net change in plan assets
2017	\$2,243,716	\$443,663	\$2,192,353	\$627,277	\$1,019,577
2018	2,305,073	459,716	2,255,280	705,007	1,114,930
2019	2,348,568	476,333	2,320,009	790,655	1,238,428
2020	2,390,542	493,533	2,386,592	885,733	1,375,317
2021	2,437,460	511,336	2,455,082	991,012	1,519,970
2022	2,476,959	529,763	2,525,533	1,107,531	1,685,868
2023	2,518,094	548,836	2,598,002	1,236,556	1,865,299
2024	2,557,349	568,577	2,672,547	1,379,233	2,063,007
2025	2,599,285	589,008	2,749,225	1,536,770	2,275,718
2026	2,658,375	610,153	2,828,100	1,709,763	2,489,641
2027	2,710,162	632,036	2,909,231	1,899,208	2,730,313
2028	2,783,344	654,684	2,992,686	2,106,059	2,970,085
2029	2,866,053	678,121	3,078,530	2,330,688	3,221,285
2030	2,960,929	702,376	3,166,831	2,573,861	3,482,140
2031	3,039,064	727,475	3,257,660	2,837,371	3,783,442
2032	3,133,682	753,448	3,351,087	3,123,034	4,093,888
2033	3,244,528	776,052	3,451,620	3,431,391	4,414,535
2034	3,346,758	799,333	3,555,168	3,764,276	4,772,019
2035	3,439,582	823,313	224,287	3,997,908	1,605,926
2036	3,537,720	848,013	231,016	4,116,839	1,658,148
2037	3,638,658	873,453	237,946	4,239,647	1,712,388
2038	3,742,475	899,657	245,084	4,366,481	1,768,747
2039	3,849,255	926,647	252,437	4,497,500	1,827,329
2040	3,959,081	954,446	260,010	4,632,870	1,888,244
2041	4,072,041	983,079	267,810	4,772,764	1,951,612
2042	4,188,224	1,012,572	275,845	4,917,363	2,017,557
2043	4,307,722	1,042,949	284,120	5,066,863	2,086,211
2044	4,430,629	1,074,237	292,644	5,221,464	2,157,716
2045	4,557,043	1,106,464	301,423	5,381,378	2,232,222
2046	4,659,196	1,139,658	310,466	5,547,855	2,338,783

EXHIBIT 5 - SUMMARY OF PLAN PROVISIONS:

This summary is prepared in accordance with Fire and Police union contracts as of July 1, 2016, and does not take into account any subsequent changes.

1. Administration

The New Pension Plan is administered by the City of Central Falls.

2. Participation

Participation is mandatory for all full-time employees whose employment.

3. Salary

Salary is defined as regular compensation plus Holiday Pay and Longevity. Salary does not include bonuses, overtime, severance pay, unused sick leave credit or other similar compensation.

4. Member Contributions

Member contributions vary depending upon date hired as follows:

<u>Date of Hire</u>	<u>Member Contribution Rate</u>
Up to November 23, 2011	9.5% of Salary
November 24, 2011 and Later	10.5% of Salary

5. Average Salary

Average salary is used to determine a participant's benefit. It is defined as the average salary during the five consecutive-year period within the final 10 years of employment that produces the highest average.

6. Creditable Service

In general, creditable service is awarded during the period in which a member contributes to the retirement system.

7. Service Retirement

a. Eligibility:

Completion of 25 years of service

b. Benefit Amount:

The retirement allowance is determined as a product of the participant's Benefit Rate times Average Salary times the Early Retirement Reduction Factor. At 25 years of credited service, the Benefit Rate is 50%. For each year after 25, up to 5 additional years, the Benefit Rate is increased 1%. The Early Retirement Reduction Factor based on the RP2000 Mortality Table and 7.5%. Factors at whole ages are shown in the following table:

<u>Age at Commencement</u>	<u>Factor</u>
57 or Over	1.000
56	.9120
55	.8327
54	.7613
53	.6967
52	.6382
51	.5852
50	.5370
49	.4932
48	.4533
47	.4169
46	.3836
45	.3532
44	.3254
43	.2999
42	.2766
41	.2551
40	.2354

8. Deferred Vested Retirement

a. Eligibility:

A participant who has completed five or more years of creditable service is eligible for a deferred vested retirement benefit.

b. Benefit Amount:

The participant's accrued benefit is based on 2% per year of credited service up to 25 years, plus 1% per year (up to 5 years) times the applicable Early Retirement Reduction Factor.

b. Refund of Contributions:

In lieu of the deferred pension benefit, a member may elect to receive a refund of their accumulated contributions with credited interest.

9. Accidental Disability

a. Eligibility:

Participants are eligible for an accidental disability benefit, regardless of service or age, if they become permanently and totally incapacitated for further duty as a result of personal injury sustained while in the performance of duties.

b. Benefit Amount:

The accidental disability amount is 66 2/3rd% of annual salary.

10. Ordinary Disability

a. Eligibility:

An ordinary disability occurs when a member becomes permanently and totally disabled due to sickness or injury that is not job related. In order to be eligible for an ordinary disability benefit, a member must have five years of service.

b. Benefit Amount:

The ordinary disability amount is based on 2% per year of credited service up to 25

years, plus 1% per year (up to 5 years) times the applicable Early Retirement Reduction Factor.

11. Survivor Benefits

a. Occupational Death:

The survivors of a firefighter who dies due to an occupational injury will be entitled to a one year's salary plus a one-year deferred pension benefit equal to 66 2/3rd% of the participant's annual Salary. The survivors of a police officer who dies due to an occupational injury will be entitled to a lump sum payment of \$10,000 plus a pension benefit equal to 66 2/3rd% of the participant's annual Salary.

b. Non-Occupational Death:

Upon the death of a member not entitled to survivor benefits, the beneficiary is entitled to a refund of all member contributions with interest.

12. Cost-of-Living Increases

The amount of annual increase will be 2% of the November 23, 2011 pension amount for those receiving a pension benefit at that time, or the initial amount of pension amount for those commencing pension payments after November 23, 2011.

13. Postretirement Death Benefits

Any benefits following the death of a member after retirement are based upon the form of benefit the participant elected at the time of retirement.

EXHIBIT 6 - ACTUARIAL METHODS AND ASSUMPTIONS:

The actuarial cost method, factors and assumptions used in determining cost estimates are presented below.

1. Member Data

The member data used in the determination of cost estimates consist of pertinent information with respect to the active, inactive, retired and disabled members of the employer as supplied by the employer to the actuary.

2. Valuation Date

July 1, 2016.

3. Actuarial Cost Method

The costs of the Plan have been determined in accordance with the individual entry age normal actuarial cost method.

4. Rate of Investment Return

It is assumed that the assets of the fund will accumulate at a compound annual rate of 7.5% per annum, net of investment management fees.

5. Cost-of-Living Increases

Cost-of-living increases have been assumed to be 2.0% per year without compounding.

6. Salary Scale

The assumed annual rates for salary increases including longevity and holiday pay is 3%.

7. Value of Investments

Assets held by the fund are valued at market value as reported by the City. The actuarial value of assets is equal to the market value.

8. Annual Rate of Withdrawal Prior to Retirement

Based on the Rhode Island MERS termination rates for Class B. The assumed annual rates of withdrawal may best be illustrated by the following rates at the following ages:

<u>Service</u>	<u>Rates</u>
0	0.1000
5	0.0354
10	0.0191
15	0.0090
20	0.0000

9. Annual Rate of Mortality

It is assumed that both pre-retirement and post retirement mortality are represented by the 2011 IRS Static Mortality Table for males and females. Mortality for disabled members is represented by the RP-2000 Disabled Mortality Table.

11. Annual Rate of Disability Prior to Retirement

Based on an analysis of experience, the assumed annual rates of disability may best be illustrated by the following rates at the following ages:

<u>Attained Age</u>	
20	0.0010
30	0.0030
40	0.0030
50	0.0125

In addition, it is assumed for the 10% of all disabilities are assumed to be ordinary and 90% are service connected.

12. Family Composition

It is assumed that 80% of all male members and 60% of all female members will be survived by a spouse and that females (males) are three years younger (older) than members.

13. Administrative Expenses

No provisions are made for administrative expenses.

EXHIBIT 7 - GLOSSARY OF TERMS:

This glossary summarizes the technical terms contained in this report.

1. Actuarial Accrued Liability

That portion of the Actuarial Present Value of plan benefits that is not provided for by future employer Normal Costs or employee contributions.

2. Actuarial Assumptions

Assumptions as to the occurrence of future events affecting the Pension Plan such as:

- Rates of investment returns
- Increases in a member's salary
- Inflation
- The probability of mortality, turnover, disablement
- Retirement at each age and other relevant items

3. Actuarial Cost Method

A procedure for allocating the Actuarial Present Value of pension plan benefits between Normal Cost and Actuarial Accrued Liability.

4. Actuarial Present Value

The single sum amount required at the valuation date that is required to provide for anticipated future events based upon the terms of the plan and the Actuarial Assumptions.

5. Forecast

A projection of future benefit payments or contribution requirements based upon the terms of the plan, the current asset amounts, the Actuarial Assumptions and additional assumptions as to the replacement of terminating employees with new employees.

6. Normal Cost

That portion of the Actuarial Present Value of future benefits that is assigned to the current year.

7. Unfunded Actuarial Accrued Liability

That portion of the Actuarial Accrued Liability that is not provided for by current actuarial value of assets.

8. Valuation Method

The method used to divide the cost of future benefits among the Actuarial Accrued Liability, the current year's Normal Costs and future years' Normal Costs. The resulting current funding requirement is then determined as the current year's Normal Cost plus the payment necessary to amortize the Unfunded Actuarial Liability.

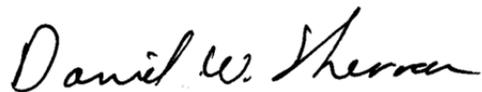
9. Vested Liability

That portion of the Actuarial Present Value of Accrued Benefits that a member would be entitled to if the member terminated employment with the employer as of the valuation date.

CERTIFICATION:

This report fairly represents the actuarial position of the Central Falls New Pension Plan contributing as of July 1, 2016, in accordance with generally accepted actuarial principles applied consistently with the preceding valuation. In our opinion, each actuarial assumption used to compute actuarial accrued liability and normal cost are reasonably related to plan experience and to reasonable expectations, and represents our best estimate of anticipated plan experience.

Sherman Actuarial Services, LLC



Daniel W. Sherman

Daniel W. Sherman, ASA, MAAA

October, 2016